

Scottsdale Road Corridor Drainage Master Plan

June 19, 2002 Public Meeting

Q: Will the project take 5 years or 5-10 years to construct?

A: Construction on some of the features could be started sooner than 5 years. For example, part of the Scottsdale Road Channel improvements could be combined with the site improvements for the planned International Fighter Pilot Museum (IFPM) project located at the southeast corner of Scottsdale and Thunderbird Roads. The current IFPM project schedule would complete these improvements in the next 2 to 3 years. Completion of all component features that make up the entire recommended alternative will probably take 5 to 10 years. The primary schedule factor involves how much funding is available each year for the improvements.

Q: Could you explain what is meant by "box and channel" in the key under the recommended alternative figure on page 2 of the handout?

A: This was a term from an early concept involving a below ground reinforced concrete box storm drain in combination with a surface channel above the storm drain. Apologies were offered for any confusion that might have been caused by the study team not having changed this term to correspond with the current recommended alternative description. The configuration provided by a box storm drain was initially thought to be necessary along parts of the 71st Street Channel but it was later found that the below ground hydraulic conveyance could be accomplished with a storm drain pipe which would be less expensive and more conventional to construct. The "box and channel" term will probably only apply to the upper part of the recommended Scottsdale Road Channel improvements from Sutton Drive to Thunderbird Road.

Q: Where will the Scottsdale Road storm drain connect to the Cactus Basin?

A: The Scottsdale Road Channel improvements in the recommended alternative involve extending the existing 90-inch diameter storm drain pipe that runs under the sidewalk on the east side of the road north from Sweetwater Avenue where it currently ends. There are no improvements planned to the existing storm drain pipe south of Sweetwater and it will continue to drain into the Cactus Park detention basin at the park's northwest corner as it has since it was originally constructed.

Q: Are there plans for a pipe under Cactus Park?

A: No. The recommended alternative will not change any of the storm drain pipes that drain into or out of the Cactus Park detention basin. The improvements that are proposed at Cactus Park involve raising the level of the landscaped area along the north side of Cactus Road from Scottsdale Road to the park entrance. The added height will be roughly 2 feet which is about even with the top of the decorative masonry wall that exists just north of the sidewalk. This will provide additional storage volume so that the detention basin can hold a 100-year storm. It will also serve to define a hardened overflow spillway that will safely pass storms larger than the Cactus Park Basin is designed to hold. When construction is completed, the area that has been raised will be re-landscaped to match the surrounding park.

Q: Couldn't the 71st Street Channel be widened north of Cortez Street?

A: The primary hydraulic feature in the recommended alternative for this reach of the 71st Street Channel is an underground storm drain pipe that would convey the entire 10-year storm flow. Any extra capacity provided by the reconstructed surface channel would be valuable but not critical. The new surface channel from Cortez Street to Sunnyside Drive could be made a little wider than the existing channel but only by a few feet. With the recommended alternative, we're trying to contain all of the permanent improvements within the existing 30-foot wide drainage tract. The existing channel is about 20 feet wide at the top so that only leaves about 5 feet on either side. We would rather not get too close to the edge of the tract with construction since there are private improvements like fences and landscaping there. The existing concrete lined channel north of Sunnyside Drive will essentially remain as it is except immediately north of Sunnyside Drive. About

30 to 50 feet of the channel bottom will be removed to accommodate a large surface grate inlet for the new underground storm drain pipe.

Q: What will be the improvement to the 71st Street Channel from Cholla Road to Cortez Street? Will the box be above the ground surface?

A: There is no reinforced concrete box storm drain envisioned in the current recommended alternative for this reach of the 71st Street Channel. As explained in the first question and answer, the below ground storm drain box was an early configuration that has since been changed to the current concept utilizing an 84-inch diameter storm drain pipe (also below ground). This storm drain pipe will run below the street in a trench that will be excavated at the time of construction. After the storm drain pipe has been installed, the trench will be backfilled and the street surface will be re-paved to its old configuration. There is no proposed box or new conveyance above ground. The street itself will continue to carry local stormwater and flows that exceed the capacity of the new storm drain pipe under the street. The only visible difference when construction is complete will be a few new catch basin inlets consisting of steel grates that will be in the center of the street.

Q: What will happen at Cortez Street and along 71st Street during construction in terms of access? How much easement is there? What impacts will occur specifically to residences along 71st Street? Will there be permanent impacts?

A: Noise, dust and traffic impacts will occur as are normally expected while constructing projects of this magnitude. These impacts will be mitigated as much as possible through restrictions imposed on the contractor. These restrictions will typically involve noise and dust control measures, restricted construction hours, limiting where the contractor can work, etc. It is currently envisioned that the existing 50-foot right-of-way for 71st Street will be enough room for the contractor to work while installing the new storm drain pipe from Cholla Road to Cortez Street. If this can be accomplished, we'll avoid having to acquire temporary construction easements outside the right-of-way. If possible, the contractor will be required to confine their work to the street itself, which is about 30 feet in width from curb to curb. The contractor will be required to protect all adjacent private improvements in place. Any existing residential improvements between the curb and the right-of-way line that are disturbed during construction will be replaced or otherwise corrected at no cost to the property owner. Access for residents and for emergency vehicles will be maintained at all times for properties along 71st Street and for properties on Kalil Circle. A traffic circulation and barricade plan will be enforced and the contractor may be restricted to a maximum length of trench that is open at any one time to minimize access impacts.

Q: What will happen to the channel at 71st Street south of Cholla Road?

A: The recommended alternative will add a second storm drain pipe below ground. The new pipe will be 72-inches in diameter and it will be placed parallel to the east side of the existing 60-inch diameter pipe. The new pipe will end at the same location as the existing pipe, about 600 feet south of Cholla Road. The bottom of the existing open channel from the end of the pipes to Mescal Street will have to be lowered about 1 foot. This channel will need to be re-landscaped after construction is complete. The 60- and 72-inch diameter pipes will both be situated under the existing surface channel. The hardened surface of the existing channel will need to be removed during construction of the new storm drain pipe. After the new pipe is placed, the surface of the channel will be re-lined to essentially the same depth and configuration as the existing channel with specific consideration to the present access it provides for the two properties south of Cholla Road on the west side of the channel. The lining of the surface channel could be made with exposed aggregate or textured, patterned or colored concrete to make it aesthetically more pleasing.

Q: Will Mescal Park be made deeper? Will the sides be made steeper?

A: No. The bottom of the detention basin in Mescal Park cannot be made any lower (deeper) without constructing another outlet pipe that would drain it at a lower elevation. The concept in the recommended alternative involves expanding the sides of the detention basin in a few areas to create just enough earth volume to raise the existing ground elevation around the perimeter of the detention basin about 1 foot. By expanding the sides and raising the perimeter of the detention

basin, it will almost contain the 100-year storm and an overflow spillway will be established so it can safely pass larger storms. The access barrier/trash rack at the outlet pipe will also be reconstructed. The sides of the detention basin where earth is excavated will be no steeper than they are now. The finished work will be re-landscaped to blend in with the rest of the park. The park will essentially look and function the same way it does now and every effort will be made to preserve existing trees and to minimize impact to the trail and path system.

Q: What about the restriction at Berneil Ditch?

A: This question was in reference to the capacity of the existing multi-barrel concrete box culvert that conveys the Berneil Ditch under Double Tree Ranch Road in Paradise Valley. This culvert has more than a 10-year capacity but will not convey a 100-year flow. Improvements to increase the capacity of this culvert were considered initially but no improvements were included with the recommended alternative. This is primarily because the recommended alternative is designed to achieve 10-year capacity for the Berneil Ditch and the only portion of the ditch that needed improvement to accomplish this is the upper reach. The study team considered that the expense, right-of-way and construction impacts involved in bringing the entire Berneil Ditch up to 100-year capacity were too much for the project to bear.

Q: Is it Paradise Valley's responsibility to maintain the Berneil Ditch?

A: Yes. The Berneil Ditch is situated entirely within a drainage tract that is owned and maintained by the Town of Paradise Valley. The Flood Control District of Maricopa County and the City of Scottsdale do not have maintenance responsibility for the ditch. It was the Town's desire to line the upper part of the Berneil Ditch with a hardened surface as part of the recommended alternative to streamline its maintenance.